NRL BAA Announcement
#68-09-02

RADIATION EFFECTS RESEARCH

The Solid State Devices Branch (Code 6810) of the Electronics Science and Technology Division of the Naval Research Laboratory (NRL) is interested in receiving proposals to investigate the effects of radiation on advanced solid state devices, developing methods to mitigate these effects, and detecting radiation. The radiation of interest includes the natural radiation environment of space (trapped particles, cosmic ray ions, solar protons, etc.) and non-natural sources (gamma rays, neutrons, pulses of energy, etc.). The effects include total dose and displacement damage and single event effects including upset, latchup, gate rupture, etc. The devices of interest include, but are not limited to, advanced technology memory devices, gate arrays, microprocessors, imagers, solar arrays and energy storage devices such as batteries. Mitigation effects include hardening by processing or design or shielding techniques especially using novel and innovative ideas not previously investigated.

Send White Papers (WP) by mail to Code 6810, 4555 Overlook Avenue, SW, Washington, DC 20375. It is preferred that proposals be unclassified and include a list of ongoing programs. Allow one month before requesting confirmation of receipt of the WP by phoning (202) 767-2533. Substantive contact should not take place prior to evaluation of the WP by NRL. If necessary, NRL will initiate substantive contact. Awards under this BAA will be for scientific study or experimentation directed toward advancing the state-of-the-art or increasing knowledge or understanding rather than focused on a specific system or hardware solution. Proposals for evolutionary engineering of improvements are not appropriate under BAA authority and are not acceptable.

It is preferred that proposals be unclassified and include a list of ongoing programs, both internally and externally funded, that are related to the proposed research. The durations of these programs are normally 12 to 36 months; for programs over 18 months, the proposal should be divided into a coherent basic task with a Government-exercised option to cover the remaining aspects of the program.